



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/626,549	07/27/2000	Celite Milbrandt	062891.0402	9693
7590	04/02/2004			
EXAMINER				
MILLS, DONALD L				
ART UNIT		PAPER NUMBER		
2662				
DATE MAILED: 04/02/2004				

Baker Botts LLP
2001 Ross Avenue
Dallas, TX 75201-2980

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/626,549

Applicant(s)

MILBRANDT, CELITE

Examiner

Donald L Mills

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-10, 12, 15-17, 19, 20, 23, 24, 26, 27, 29, 30, 32-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 11, 13, 14, 18, 21, 22, 25, 28, 31, 37 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16, 17, 19, 23, 27, 29, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Fernandez et al. (US 4,893,305), hereinafter referred to as Fernandez.

Regarding claims 16 and 23, Fernandez discloses a multiplexed modem, which comprises:

Coupling a digital subscriber line access multiplexer to a spectral management channel (Claims 16 and 23) (Referring to Figure 1, the multiplexers communicate data via the transmission channel 13. See column 5, lines 4-6,)

Transmitting (Claim 16)/Receiving (Claim 23) a spectral management message over the spectral management channel (Referring to Figure 1, the multiplexer is reconfigured to a new mux configuration, which inherently requires transmission and reception between both multiplexers over the transmission channel in order to configure both multiplexers appropriately. See column 6, lines 9-13,) *the spectral management message comprising information related to a training of a digital subscriber line modem by a carrier* (Referring to Figure 1, responding with a synchronizing sequence concluding a handshake, when received from the master modem

Art Unit: 2662

10, which inherently requires a carrier for transmission and reception between modems. See column 6, lines 39-41.)

Regarding claims 17, 19, 27, and 30; Fernandez discloses *wherein the spectral management message comprises a training message, the training message operable to indicate that the carrier has at least received a request to train the digital subscriber line modem (Claims 17, 27, and 30)/further comprising training the digital subscriber line modem (Claim 19)* (Referring to Figure 1, a drop code and new multiplexer configuration are transmitted from the slave modem 12 when a drop code is detected, which inherently requires a carrier for transmission and reception between modems. See column 6, lines 32-35.)

Regarding claim 29, Fernandez discloses a multiplexed modem, which comprises:

A computer readable medium (Referring to Figure 1, data pump 32, inherently utilizes a memory to process data. See column 5, lines 5-6.)

Software encoded on the computer readable medium, the software operable when executed (Referring to Figure 1, data pump 32, inherently utilizes software to receive and transmit data stored in its buffer. See column 5, lines 5-6,) *to transmit and receive a spectral management message over a spectral management channel, the spectral management message comprising information related to a training of a digital subscriber line modem by a carrier* (Referring to Figure 1, responding with a synchronizing sequence concluding a handshake, over channel 13, received from the master modem 10, which inherently requires a carrier for transmission and reception between modems. See column 6, lines 39-41.)

Art Unit: 2662

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandez et al. (US 4,893,305), hereinafter referred to as Fernandez, in view of Fluss (US 6,304, 578 B1).

Regarding claim 1, Fernandez discloses multiplexed modem, which comprises:

A plurality of digital subscriber access multiplexers (Referring to Figure 1, four port multiplexers 30 and 36 that interface with data terminal equipment (DTE) 20, 22, and 24. See column 4, lines 64 and 42-43; and column 5, line 9.)

Each digital subscriber line access multiplexer operable to transmit and receive at least one message (Referring to Figure 1, the multiplexer is reconfigured to a new mux configuration, which inherently requires transmission and reception between both multiplexers in order to configure both multiplexers appropriately. See column 6, lines 9-13,) *the message comprising information related to a training of a digital subscriber line modem by a carrier* (Referring to Figure 1, respond with a synchronizing sequence concluding a handshake, when received from the master modem 10, which inherently requires a carrier for transmission and reception between modems. See column 6, lines 39-41.) Fernandez does not disclose *a communication channel coupling the plurality of digital subscriber line access multiplexers*.

Fluss teaches a central office 203 comprising an Ethernet hub 204, which connects to a plurality of DSL access multiplexers (DSLAM) 205 (See Figure 1, column 5, lines 17-18 and 21,) for receiving control packets for setting up or tearing down connections (See column 7, line

Art Unit: 2662

28.) Fluss further teaches that users may experience unwanted jerky and choppy displays that are annoying and frustrating due to long periods between data bursts (See column 2, lines 61-65.)

Fernandez teaches that it is often desirable to reconfigure the channel or port management in order to increase the system's efficiency (See column 5, lines 22-24,) by automatically coordinating multi-port mode switching at two modems linked by a transmission path (See column 2, lines 52-53.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the dynamic port allocation system of Fernandez in the xDSL network of Fluss. One of ordinary skill in the art would have been motivated to do so in order to realize increased system efficiency in a DSL network. In addition, one of ordinary skill in the art would have been motivated to do so in order to increase system efficiency by utilizing channel or port management for two modems linked by a DSL transmission path.

Regarding claim 2 as explained above in the rejection statement of claim 1, Fernandez and Fluss disclose all the claim limitations of claim 1 (parent claim). Fernandez does not disclose *the communication channel comprising a 10/100 base-T Ethernet connection*.

Fluss teaches a central office 203 comprising an Ethernet hub 204, which connects to a plurality of DSL access multiplexers (DSLAM) 205 (See Figure 1, column 5, lines 17-18 and 21.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the Ethernet hub of Fluss with a 10/100 base-T Ethernet connection. One of ordinary skill in the art would have been motivated to do so because 10/100 base-T Ethernet connections are well known in the art and unexpected results are not produced.

Art Unit: 2662

Regarding claim 3 as explained above in the rejection statement of claim 1, Fernandez and Fluss disclose all the claim limitations of claim 1 (parent claim). Fernandez does not disclose *wherein each digital subscriber line access multiplexer comprises 10/100 base-T Ethernet port.*

Fluss teaches a central office 203 comprising an Ethernet hub 204, which connects to a plurality of DSL access multiplexers (DSLAM) 205 (See Figure 1, column 5, lines 17-18 and 21.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement 10/100 base-T Ethernet ports in the DSLAMs of Fluss. One of ordinary skill in the art would have been motivated to do so because 10/100 base-T Ethernet connections are well known in the art and unexpected results are not produced.

Regarding claim 4 as explained above in the rejection statement of claim 1, Fernandez and Fluss disclose all the claim limitations of claim 1 (parent claim). Fernandez further discloses *wherein each digital subscriber line access multiplexer is operable to transmit a training message* (Referring to Figure 1, responding with a synchronizing sequence that concludes a handshake, when received from the master modem 10, when communicating with DTEs 20, 22, and 24. See column 6, lines 39-41,) *the training message operable to indicate that the carrier has at least received a request to train the digital subscriber modem* (Referring to Figure 1, a drop code and new multiplexer configuration are transmitted from the slave modem 12 when a drop code is detected. See column 6, lines 32-35.) Fernandez does not disclose *a communication channel.*

Art Unit: 2662

Fluss teaches a central office 203 comprising an Ethernet hub 204, which connects to a plurality of DSL access multiplexers (DSLAM) 205 (See Figure 1, column 5, lines 17-18 and 21,) for receiving control packets for setting up or tearing down connections (See column 7, line 28.) Fluss further teaches that users may experience unwanted jerky and choppy displays that are annoying and frustrating due to long periods between data bursts (See column 2, lines 61-65.) Fernandez teaches that it is often desirable to reconfigure the channel or port management in order to increase the system's efficiency (See column 5, lines 22-24,) by automatically coordinating multi-port mode switching at two modems linked by a transmission path (See column 2, lines 52-53.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the dynamic port allocation system of Fernandez in the xDSL network of Fluss. One of ordinary skill in the art would have been motivated to do so in order to realize increased system efficiency in a DSL network. In addition, one of ordinary skill in the art would have been motivated to do so in order to increase system efficiency by utilizing channel or port management for two modems linked by a DSL transmission path.

5. Claims 20, 24, 26, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandez et al. (US 4,893,305), hereinafter referred to as Fernandez, in view of Cole et al. (US 6,246,754 B1), hereinafter referred to as Cole.

Regarding claims 20, 24, and 32 as explained above in the rejection statement of claims 16, 23, and 29; Fernandez discloses all the claim limitations of claims 16, 23, and 29 (parent claim). Fernandez does not disclose *wherein the spectral management message comprises a*

Art Unit: 2662

distress message, the distress message operable to indicate that the digital subscriber line modem violates at least one compliance guideline (Claims 20, 24, and 32).

Cole teaches a mechanism for changing a modem's connection rate when one modem observes that a substantial amount of jitter has arisen on the line, which inherently comprises transmitting a distress message indicating the new condition, which requires retraining (See column 6, lines 24-30.) Cole further teaches that the request may be made as a result of changing line conditions, changing system demands, changing data transfer requirements, or other altered conditions under which the modems are operating (See column 2, lines 12-15.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mechanism for changing a modem's connection rate of Cole in the system of Fernandez. One of ordinary skill in the art would have been motivated to do so in order to compensate for changing conditions on the communications line.

Regarding claim 26 as explained above in the rejection statement of claim 23, Fernandez discloses all the claim limitations of claim 23 (parent claim). Fernandez does not disclose *retraining the digital subscriber line modem in response to receiving the distress message.*

Cole teaches a mechanism for changing a modem's connection rate when one modem observes that a substantial amount of jitter has arisen on the line, which inherently comprises transmitting a distress message indicating the new condition, which requires retraining (See column 6, lines 24-30.) Cole further teaches that the request may be made as a result of changing line conditions, changing system demands, changing data transfer requirements, or other altered conditions under which the modems are operating (See column 2, lines 12-15.)

Art Unit: 2662

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mechanism for changing a modem's connection rate of Cole in the system of Fernandez. One of ordinary skill in the art would have been motivated to do so in order to compensate for changing conditions on the communications line.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fernandez et al. (US 4,893,305), hereinafter referred to as Fernandez, in view Fluss (US 6,304, 578 B1) in further view of Cole et al. (US 6,246,754 B1), hereinafter referred to as Cole.

Regarding claim 6 as explained above in the rejection statement of claim 1, Fernandez and Fluss disclose all the claim limitations of claim 1 (parent claim). Fernandez does not disclose *wherein each digital subscriber line access multiplexer is operable to transmit a distress message over the communications channel, the distress message operable to indicate that the digital subscriber line modem violates at least one compliance guideline.*

Cole teaches a mechanism for changing a modem's connection rate when one modem observes that a substantial amount of jitter has arisen on the line, which inherently comprises transmitting a distress message indicating the new condition (See column 6, lines 24-30.) Cole further teaches that the request may be made as a result of changing line conditions, changing system demands, changing data transfer requirements, or other altered conditions under which the modems are operating (See column 2, lines 12-15.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mechanism for changing a modem's connection rate of Cole in the

Art Unit: 2662

network of Fluss. One of ordinary skill in the art would have been motivated to do so in order to compensate for changing conditions on the communications line.

7. Claims 8-10, 12, 15, 35, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. (US 6,246,754 B1), hereinafter referred to as Cole, in view of Chin et al. (US 6,343,077 B1), hereinafter referred to as Chin.

Regarding claims 8, 10, 12, 35, 36, and 38, Cole discloses a mechanism for changing a modem's connection rate, which comprises:

A controller operable to receive a first spectral management message (Claim 8)/Means for generating and receiving at least one spectral message (Claim 35) (Referring to Figure 1, the microprocessor 30 sends and receives signals over the data line, which inherently comprise training messages generated by the training 112 phase. See column 2, lines 57-58 and column 3, lines 63-65,) the spectral management message comprising information related to a training of a digital subscriber line modem over one of the subscriber lines (Claims 8 and 35) (Referring to Figure 2, a handshaking procedure 110, which comprises training 112 phase, for an xDSL modem which inherently transmits and receives over a digital subscriber line. See column 3, lines 44-45, 64, and 34-35.)

An interface coupled to the controller and operable to receive the spectral management message over a spectral management channel (Claim 8)/Means for coupling the processing means to a spectral management channel (Claim 35) (Referring to Figure 1, interface 50 sends and receives signals over the data line, which inherently comprises transmitting and receiving training messages generated by the training 112 phase. See column 2, lines 57-60 and column 3,

Art Unit: 2662

lines 63-65.) Cole further discloses *wherein the controller is operable to receive a training message, (Claim 10)/wherein the message comprises a training message (Claim 38), the training message operable to indicate that the carrier has at least received a request to train the digital subscriber line modem* (Referring to Figure 2, microprocessor 30 inherently receives training messages when one of the modems signal the other that retraining 150 should be performed, which inherently comprises an indication that the carrier has received a request to train the DSL modem. See column 3, lines 59-62 and 34-35.) Cole further discloses *wherein the controller is operable to receive a distress message (Claim 12)/wherein the message comprises a distress message (Claim 36), the distress message operable to indicate that the digital subscriber line modem violates at least one compliance guideline* (Referring to Figure 2, microprocessor 30 inherently receives renegotiation 160 messages when one of the modems signal the other that retraining 150 should be performed, when a different technology or bit rate is better adapted. See column 3, lines 59-62.) Cole does not disclose *a multiplexer operable to receive (Claim 8)/means for receiving (Claim 35) signals from a plurality of digital subscriber line connections and to aggregate the signals for transmission over a high-speed backbone line.*

Chin teaches a Digital Subscriber Line Access Multiplexer (DSLAM) for connecting to multiple ADSL lines (See column 2, lines 53-56,) that connects to an ATM switch of 155 to 622 Mbps (See column 4, lines 5-7.) Chin further teaches this system reduces the number of required high-speed digital ports on an ATM switch thereby reducing costs (See column 1, lines 29-32 and line 48.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the modem of Cole in the system of Chin. One of ordinary skill in the

Art Unit: 2662

art would have been motivated to do so in order to create a DSL network at a reduced cost with greater interoperability with other modems.

Regarding claim 9 as explained above in the rejection statement of claim 8, Cole and Chin disclose all the claim limitations of claim 8 (parent claim). Cole does not disclose *wherein the controller is also operable to generate a second spectral management message; and the interface is also operable to transmit the second spectral management message over the spectral management channel.*

Cole teaches a mechanism for changing a modem's connection rate when one modem observes that a substantial amount of jitter has arisen on the line, which requires retraining (See column 6, lines 24-30.) Cole further teaches that the request may be made as a result of changing line conditions, changing system demands, changing data transfer requirements, or other altered conditions under which the modems are operating (See column 2, lines 12-15.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to generate and transmit a second message in the system of Cole. One of ordinary skill in the art would have been motivated to do so because multiple retraining scenarios can be encountered. In addition, unexpected results are not produced.

Regarding claim 15 as explained above in the rejection of claim 8, Cole does not disclose all the claim limitations of claim 8 (parent claim). Cole and Chin do not disclose *wherein the interface comprises a 10/100 base-T Ethernet port.*

Chin teaches a Digital Subscriber Line Access Multiplexer (DSLAM) for connecting to multiple ADSL lines (See column 2, lines 53-56,) that operate at 25/50 Mhz (See column 2, lines 63-65.)

Art Unit: 2662

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement an interface comprising a 10/100 base-T Ethernet port in the system of Chin. One of ordinary skill in the art would have been motivated to do so 10/100 base-T Ethernet operates at a multiple of the 25/50 Mhz frequency and Ethernet is well known in the art.

Allowable Subject Matter

8. Claims 5, 7, 11, 13, 14, 18, 21, 22, 25, 28, 31, 33, 34, 37, and 39 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed February 5, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument based on 35 USC § 102 regarding claims 16, 17, 19, 23, 27, and 29-30; applicant states Fernandez fails to disclose, either expressly or inherently, every element of claim 16 and subsequent related claims. Examiner respectfully disagrees. In view of the specification, the applicant defines the "spectral management message comprising information related to a training of a digital subscriber line modem by a carrier" as *a message which informs DSLAMs 30 when a DSL carrier has at least received a request to train a DSL modem* (See page 7, lines 23-25.) In addition, the specification provides no further definition of a "spectral management message" or the "information related to training."

Art Unit: 2662

In view of the specification, the examiner interprets the transmission channel 13 as the “spectral management channel” (See column 5, lines 4-6,) and the synchronizing sequence concluding a handshake, as the “spectral management message” (See column 6, lines 39-41.) Furthermore, handshaking is interpreted as “information related to a training of the digital subscriber line modem.” Therefore, Fernandez discloses, either expressly or inherently, every element of claims 16, 17, 19, 23, 27, and 29-30.

In response to applicant’s argument based on 35 USC § 103(a) regarding claims 1-4, applicant states Fernandez does not make reference to “training” or “information related to training,” Fluss does not disclose “transmitting/receiving a message over the communications channel comprising information related to training,” and hindsight reconstruction of claim 1.

In response to applicant’s argument that Fernandez does not make reference to “training” or “information related to training” see comments above.

In response to applicant's argument that Fluss does not disclose, teach, or suggest, “digital subscriber line access multiplexers operable to a transmit/receive a message relating to training over the communication channel,” the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. Nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Furthermore, Fluss teaches a “communication channel coupling the plurality of digital subscriber line access multiplexers” as an Ethernet hub which connects a plurality of DSL access multiplexers for receiving control packets for setting up or tearing down connections (See

Art Unit: 2662

column 7, line 28.) And, Fernandez teaches a synchronizing sequence concluding a handshake, as the "spectral management message" (See column 6, lines 39-41.) Wherein handshaking is interpreted as "information related to a training of the digital subscriber line modem." And when the combined teachings are considered by one of ordinary skill in the art, claims 1-4 are made obvious.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case it would have been obvious to one of ordinary skill in the art to combine the teachings of Fluss and Fernandez, one of ordinary skill in the art would have been motivated to do so in order to increase system efficiency by utilizing channel or port management for two

Art Unit: 2662

modems linked by a DSL transmission path as taught by Fernandez (See column 2, lines 52-53 and column 5, lines 22-24.)

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 703-305-7869. The examiner can normally be reached on 8:00 AM to 4:30 PM.

Art Unit: 2662

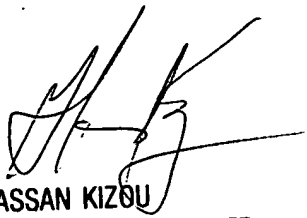
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald L Mills

DLM

March 24, 2004


HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600